

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Gras-Masse et al.

Examiner: S. Foley

Serial No.: 09/555,780

Group Art Unit: 1648

Filed: June 2, 2000

Docket: 1091-2 PCT/US

For: MIXED LIPOPEPTIDE NICELLES  
FOR INDUCING AN IMMUNE  
RESPONSE AND THEIR  
THERAPEUTIC USES

Dated: April 13, 2001

Assistant Commissioner for Patents  
Washington, DC 20231

*I hereby certify this correspondence is being deposited  
with the United States Postal Service as first class  
mail, postpaid in an envelope, addressed to: Assistant  
Commissioner for Patents, Washington, D.C.  
20231 on April 13, 2001*

Signature: \_\_\_\_\_

*Joyce Peterson*

**AMENDMENT IN RESPONSE TO NOTICE TO COMPLY WITH  
REQUIREMENTS FOR PATENT APPLICATIONS  
CONTAINING NUCLEOTIDE SEQUENCE AND/OR  
AMINO ACID SEQUENCE DISCLOSURES**

Sir:

In response to the Notice to Comply with Requirements for Patent Applications  
Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures mailed April 3,  
2001, Applicants enclose herewith the following:

1. Diskette containing a substitute Sequence Listing in computer-readable form,  
corrected as directed in the Notice;
2. A substitute paper copy of the "Sequence Listing"; and
3. A copy of the Notice.

Applicants have amended the Sequence Listing to comply with the above-referenced  
Notice. Entry of the amended Sequence Listing into the specification of the application is  
respectfully requested.

GP164.8  
Box 1509  
PATENT

#11  
Amdt. C  
w/ Seq. list  
4/13/01

RECEIVED

APR 18 2001

TECH CENTER 1600/2900

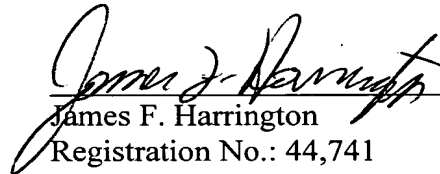
Applicants: Gras-Masse, et al.  
Serial No. 09/555,780  
Filed: June 2, 2001  
Page 2



The content of the paper and computer-readable copies of the Sequence Listing are the same. Also, the amendment as required by the Notice, merely corrects clerical errors, and does not add any new matter. The sequence information is not changed in any way.

If any additional fees are due or an overpayment has been made, please charge our Deposit Account No. 08-2461 or credit our Deposit Account for such sum. A duplicate copy of this sheet is enclosed for that purpose.

Respectfully submitted,

  
James F. Harrington  
Registration No.: 44,741  
Attorney for Applicants

HOFFMANN & BARON, LLP  
6900 Jericho Turnpike  
Syosset, New York 11791  
(516) 822-3550  
JFH/jp

131685\_1.DOC



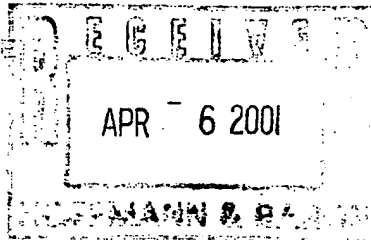
**UNITED STATES DEPARTMENT OF COMMERCE**  
**United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/555,780	11/17/00 06/02/00	GRAS-MASSE	H 1091/2 PCT/US

IRVING N FEIT  
HOFFMANN & BARON  
6900 JERICHO TURNPIKE  
SYOSSET NY 11791

HM12/0403



EXAMINER

FOLEY, S

ART UNIT	PAPER NUMBER
----------	--------------

1648

60

DATE MAILED:

04/03/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Address: ASSISTANT COMMISSIONER FOR PATENTS

Washington, D.C. 20231

APPLICATION NO./ CONTROL NO.	FILING DATE 6/2/2000	FIRST NAMED INVENTOR / <i>GRAS-MASSE</i> PATENT IN REEXAMINATION	ATTORNEY DOCKET NO. 1091-2 PCT/US
---------------------------------	-------------------------	---	--------------------------------------

09/555780

EXAMINER
----------

*SHANON FOLEY*

ART UNIT	PAPER
----------	-------

*1648*

10

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

The communication filed 3/12/01 is not fully responsive to the Office communication mailed 2/8/01 for the reason(s) set forth on the attached Notice To Comply With The Sequence Rules or CRF Diskette Problem Report. Applicant must comply with the requirements of the sequence rules (37 CFR 1.821 - 1.825) before the application can be examined under 35 U.S.C. §§ 131 and 132.

Since the above-mentioned reply appears to be *bona fide* attempt to comply with the requirements of the sequence rules (37 CFR 1.821 - 1.825), applicant is given a TIME PERIOD of **ONE (1) MONTH** from the mailing date of this communication within which to correct the deficiency so as to comply with the sequence rules (37 CFR 1.821 - 1.825) in order to avoid abandonment of the application under 37 CFR 1.821(g). **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shanon Foley whose telephone number is (703) 308-3983.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel, can be reached on (703) 308-4027. The fax phone number for this Group is now (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

April 2, 2001

*Mary Mosher*

MARY E. MOSHER  
PRIMARY EXAMINER  
GROUP 1800

*16a*

Application No.: 09/555780

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING  
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☐ 7. Other: \_\_\_\_\_

**Applicant Must Provide:**

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☐ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216

For CRF Submission Help, call (703) 308-4212

PatentIn Software Program Support (SIRA)

Technical Assistance.....703-287-0200

To Purchase PatentIn Software.....703-306-2600

**PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR RESPONSE**

10103

## RAW SEQUENCE LISTING ERROR REPORT

BIOTECHNOLOGY  
SYSTEMS  
BRANCH

RECEIVED  
MAR 01 2001  
102900

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/555,780A  
Source: 1648  
Date Processed by STIC: 2/20/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.  
PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)  
PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER  
VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND  
TRADEMARK OFFICE WEBSITE. SEE BELOW.

### Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

## Kaw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED	CORRECTION
----------------	-----------	------------

SERIAL NUMBER: 09/555,780A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- |    |  |   |
|----|--|---|
| 1  | _____ Wrapped Nucleics                 | The number/text at the end of each line "wrapped" down to the next line.<br>This may occur if your file was retrieved in a word processor after creating it.<br>Please adjust your right margin to .3, as this will prevent "wrapping".   |
| 2  | _____ Wrapped Aminos                   | The amino acid number/text at the end of each line "wrapped" down to the next line.<br>This may occur if your file was retrieved in a word processor after creating it.<br>Please adjust your right margin to .3, as this will prevent "wrapping".  |
| 3  | _____ Incorrect Line Length            | The rules require that a line not exceed 72 characters in length. This includes spaces.   |
| 4  | _____ Misaligned Amino Acid Numbering  | The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.   |
| 5  | _____ Non-ASCII                        | This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.<br>Please ensure your subsequent submission is saved in ASCII text so that it can be processed.   |
| 6  | _____ Variable Length                  | Sequence(s) _____ contain n's or Xaa's which represented more than one residue.<br>As per the rules, each n or Xaa can only represent a single residue.<br>Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.  |
| 7  | _____ PatentIn ver. 2.0 "bug"          | A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.    |
| 8  | _____ Skipped Sequences (OLD RULES)    | Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence:<br>(2) INFORMATION FOR SEQ ID NO:X:<br>(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")<br>(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:<br>This sequence is intentionally skipped<br><br>Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s). |
| 9  | _____ Skipped Sequences (NEW RULES)    | Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence.<br><210> sequence id number<br><400> sequence id number<br>000  |
| 10 | _____ Use of n's or Xaa's (NEW RULES)  | Use of n's and/or Xaa's have been detected in the Sequence Listing.<br>Use of <220> to <223> is MANDATORY if n's or Xaa's are present.<br>In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.  |
| 11 | _____ Use of <213>Organism (NEW RULES) | Sequence(s) _____ are missing this mandatory field or its response.   |
| 12 | _____ Use of <220>Feature (NEW RULES)  | Sequence(s) _____ are missing the <220>Feature and associated headings.<br>Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"<br>Please explain source of genetic material in <220> to <223> section.<br>(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)  |
| 13 | _____ PatentIn ver. 2.0 "bug"          | Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted "file," resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other means to copy file to floppy disk.  |



1648

## RAW SEQUENCE LISTING

DATE: 02/20/2001

PATENT APPLICATION: US/09/555,780A

TIME: 17:33:36

Input Set : A:\Pto.txt

Output Set: N:\CRF3\02202001\1555780A.raw

Does Not Comply  
Corrected Diskette Needed*error throughout**OK*

3 <110> APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE M  
 4 CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (C.N.  
 5 INSTITUT PASTEUR DE LILLE  
 6 GRAS-MASSE, Helene  
 7 BOSSUS, Marc  
 8 LIPPENS, Guy  
 9 WIERUSZESKI, Jean-Michel  
 10 TARTAR, Andre  
 11 GUILLET, Jean-Gerard  
 12 BOURGAULT-VILLADA, Isabelle  
 14 <120> TITLE OF INVENTION: Mixed lipopeptide micelles for inducing an immune  
 15 response and their therapeutic uses.  
 17 <130> FILE REFERENCE: Lipopeptides-INSERM  
 19 <140> CURRENT APPLICATION NUMBER: US/09/555,780A  
 20 <141> CURRENT FILING DATE: 2000-11-17  
 22 <150> PRIOR APPLICATION NUMBER: FR9715246  
 23 <151> PRIOR FILING DATE: 1997-12-03  
 E--> 25 <160> NUMBER OF SEQ ID NOS: 284 *285 in file (p.9)*  
 27 <170> SOFTWARE: PatentIn Ver. 2.1

## ERRORED SEQUENCES

40 <210> SEQ ID NO: 2  
 41 <211> LENGTH: 33  
 42 <212> TYPE: PRT  
 43 <213> ORGANISM: Human immunodeficiency virus  
 45 <220> FEATURE:  
 46 <221> NAME/KEY: LIPID  
 47 <222> LOCATION: (33)  
 48 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE  
 50 <400> SEQUENCE: 2  
 51 Val Gly Phe Pro Val Thr Pro Gln Val Pro Leu Arg Pro Met Thr  
 E--> 52 Tyr  
 E--> 53 1 5 10 15  
 55 Lys Ala Ala Val Asp Leu Ser His Phe Leu Lys Glu Lys Gly Gly  
 E--> 56 Leu  
 E--> 57 20 25 30  
 59 Lys  
 64 <210> SEQ ID NO: 3  
 65 <211> LENGTH: 32  
 66 <212> TYPE: PRT  
 67 <213> ORGANISM: Human immunodeficiency virus  
 69 <220> FEATURE:  
 70 <221> NAME/KEY: LIPID  
 71 <222> LOCATION: (32)  
 72 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE

*format error - see  
item 2  
on Error  
summary sheet*

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/555,780A  
 DATE: 02/20/2001  
 TIME: 17:33:36

Input Set : A:\Pto.txt  
 Output Set: N:\CRF3\02202001\I555780A.raw

```

74 <400> SEQUENCE: 3
75 Thr Gln Gly Tyr Phe Pro Asp Trp Gln Asn Tyr Thr Pro Gly Pro
E--> 76 Gly
E--> 77 1 5 10 15
79 Val Arg Tyr Pro Leu Thr Phe Gly Trp Cys Tyr Lys Leu Val Pro
E--> 80 Lys
E--> 81 20 25 30
88 <210> SEQ ID NO: 4
89 <211> LENGTH: 25
90 <212> TYPE: PRT
91 <213> ORGANISM: Human immunodeficiency virus
93 <220> FEATURE:
94 <221> NAME/KEY: LIPID
95 <222> LOCATION: (25)
96 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE
98 <400> SEQUENCE: 4
99 Glu Trp Arg Phe Asp Ser Arg Leu Ala Phe His His Val Ala Arg
E--> 100 Glu
E--> 101 1 5 10 15
103 Leu His Pro Glu Tyr Phe Lys Asn Lys
E--> 104 20 25
108 <210> SEQ ID NO: 5
109 <211> LENGTH: 33
110 <212> TYPE: PRT
111 <213> ORGANISM: Human immunodeficiency virus
113 <220> FEATURE:
114 <221> NAME/KEY: LIPID
115 <222> LOCATION: (33)
116 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE
118 <400> SEQUENCE: 5
119 Asp Leu Asn Thr Met Leu Asn Thr Val Gly Gly His Gln Ala Ala
E--> 120 Met
E--> 121 1 5 10 15
123 Gln Met Leu Lys Glu Thr Ile Asn Glu Glu Ala Ala Glu Trp Asp
E--> 124 Arg
E--> 125 20 25 30
127 Lys
132 <210> SEQ ID NO: 6
133 <211> LENGTH: 33
134 <212> TYPE: PRT
135 <213> ORGANISM: Human immunodeficiency virus
137 <220> FEATURE:
138 <221> NAME/KEY: LIPID
139 <222> LOCATION: (33)
140 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE
142 <400> SEQUENCE: 6
143 Asn Pro Pro Ile Pro Val Gly Glu Ile Tyr Lys Arg Trp Ile Ile
E--> 144 Leu
E--> 145 1 5 10 15

```

*same error*

*same*

*same*

*same*

*same*

## RAW SEQUENCE LISTING

DATE: 02/20/2001

PATENT APPLICATION: US/09/555,780A

TIME: 17:33:36

Input Set : A:\Pto.txt

Output Set: N:\CRF3\02202001\I555780A.raw

147 Gly Leu Asn Lys Ile Val Arg Met Tyr Ser Pro Thr Ser Ile Leu *same*

E--&gt; 148 Asp

E--&gt; 149                   20                   25                   30

151 Lys

156 &lt;210&gt; SEQ ID NO: 7

157 &lt;211&gt; LENGTH: 34

158 &lt;212&gt; TYPE: PRT

159 &lt;213&gt; ORGANISM: Human immunodeficiency virus

161 &lt;220&gt; FEATURE:

162 &lt;221&gt; NAME/KEY: LIPID

163 &lt;222&gt; LOCATION: (34)

164 &lt;223&gt; OTHER INFORMATION: PALMITOYL DERIVATIVE

166 &lt;400&gt; SEQUENCE: 7

167 Thr Arg Pro Asn Asn Asn Thr Arg Lys Ser Ile His Ile Gly Pro

E--&gt; 168 Gly

E--&gt; 169   1                   5                   10                   15

171 Arg Ala Phe Tyr Ala Thr Gly Glu Ile Ile Gly Asp Ile Arg Gln *same*

E--&gt; 172 Ala

E--&gt; 173                   20                   25                   30

175 His Lys

345 &lt;210&gt; SEQ ID NO: 23

346 &lt;211&gt; LENGTH: 27

347 &lt;212&gt; TYPE: PRT

348 &lt;213&gt; ORGANISM: Simian immunodeficiency virus

350 &lt;220&gt; FEATURE:

351 &lt;221&gt; NAME/KEY: LIPID

352 &lt;222&gt; LOCATION: (27)

353 &lt;223&gt; OTHER INFORMATION: PALMITOYL DERIVATIVE

356 &lt;400&gt; SEQUENCE: 23

357 Ser Val Arg Pro Lys Val Pro Leu Arg Ala Met Thr Tyr Lys Leu

E--&gt; 358 Ala

E--&gt; 359   1                   5                   10                   15

361 Ile Asp Met Ser His Phe Ile Lys Glu Lys Lys

E--&gt; 362                   20                   25

366 &lt;210&gt; SEQ ID NO: 24

367 &lt;211&gt; LENGTH: 24

368 &lt;212&gt; TYPE: PRT

369 &lt;213&gt; ORGANISM: Simian immunodeficiency virus

371 &lt;220&gt; FEATURE:

372 &lt;221&gt; NAME/KEY: LIPID

373 &lt;222&gt; LOCATION: (24)

374 &lt;223&gt; OTHER INFORMATION: PALMITOYL DERIVATIVE

376 &lt;400&gt; SEQUENCE: 24

377 Glu Lys Gly Gly Leu Glu Gly Ile Tyr Tyr Ser Ala Arg Arg His *same*

E--&gt; 378 Arg

E--&gt; 379   1                   5                   10                   15

381 Ile Leu Asp Met Tyr Leu Glu Lys

E--&gt; 382                   20

386 &lt;210&gt; SEQ ID NO: 25

## RAW SEQUENCE LISTING

DATE: 02/20/2001

PATENT APPLICATION: US/09/555,780A

TIME: 17:33:36

Input Set : A:\Pto.txt

Output Set: N:\CRF3\02202001\I555780A.raw

```

387 <211> LENGTH: 25
388 <212> TYPE: PRT
389 <213> ORGANISM: Simian immunodeficiency virus
W--> 390 <220> FEATURE:
391 <221> NAME/KEY: LIPID
392 <222> LOCATION: (25)
393 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE
395 <400> SEQUENCE: 25
396 Asp Trp Gln Asp Tyr Thr Ser Gly Pro Gly Ile Arg Tyr Pro Lys
E--> 397 Thr
E--> 398 1 5 10 15
400 Phe Gly Trp Leu Trp Lys Leu Val Lys
E--> 401 20 25
405 <210> SEQ ID NO: 26
406 <211> LENGTH: 26
407 <212> TYPE: PRT
408 <213> ORGANISM: Simian immunodeficiency virus
410 <220> FEATURE:
411 <221> NAME/KEY: LIPID
412 <222> LOCATION: (26)
413 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE
415 <400> SEQUENCE: 26
416 Ser Lys Trp Asp Asp Pro Trp Gly Glu Val Leu Ala Trp Lys Phe
E--> 417 Asp
E--> 418 1 5 10 15
420 Pro Thr Leu Ala Tyr Thr Tyr Glu Ala Lys
E--> 421 20 25
425 <210> SEQ ID NO: 27
426 <211> LENGTH: 28
427 <212> TYPE: PRT
428 <213> ORGANISM: Simian immunodeficiency virus
430 <220> FEATURE:
431 <221> NAME/KEY: LIPID
432 <222> LOCATION: (28)
433 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE
435 <400> SEQUENCE: 27
436 Tyr Thr Tyr Glu Ala Tyr Ala Arg Tyr Pro Glu Glu Leu Glu Ala
E--> 437 Ser
E--> 438 1 5 10 15
440 Gln Ala Cys Gln Arg Lys Arg Leu Glu Glu Gly Lys
E--> 441 20 25
445 <210> SEQ ID NO: 28
446 <211> LENGTH: 32
447 <212> TYPE: PRT
448 <213> ORGANISM: Simian immunodeficiency virus
450 <220> FEATURE:
451 <221> NAME/KEY: LIPID
452 <222> LOCATION: (32)
453 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE

```

*same**same**same*

## RAW SEQUENCE LISTING

DATE: 02/26/2001

PATENT APPLICATION: US/09/555,780A

TIME: 17:33:36

Input Set : A:\Pto.txt

Output Set: N:\CRF3\02202001\I555780A.raw

```

455 <400> SEQUENCE: 28
456 Lys Phe Gly Ala Glu Val Val Pro Gly Phe Gln Ala Leu Ser Glu
E--> 457 Gly
E--> 458 1 5 10 15
460 Cys Thr Pro Tyr Asp Ile Asn Gln Met Leu Asn Cys Val Gly Asp
E--> 461 Lys
E--> 462 20 25 30
469 <210> SEQ ID NO: 29
470 <211> LENGTH: 37
471 <212> TYPE: PRT
472 <213> ORGANISM: Simian immunodeficiency virus
474 <220> FEATURE:
475 <221> NAME/KEY: LIPID
476 <222> LOCATION: (37)
477 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE
479 <400> SEQUENCE: 29
480 Gln Ile Gln Trp Met Tyr Arg Gln Gln Asn Pro Ile Val Gly Asn
E--> 481 Ile
E--> 482 1 5 10 15
484 Tyr Arg Arg Trp Ile Gln Leu Gly Leu Gln Lys Cys Val Arg Met
E--> 485 Tyr
E--> 486 20 25 30
488 Asn Pro Thr Asn Lys
E--> 489 35
493 <210> SEQ ID NO: 30
494 <211> LENGTH: 18
495 <212> TYPE: PRT
496 <213> ORGANISM: Simian immunodeficiency virus
498 <220> FEATURE:
499 <221> NAME/KEY: LIPID
500 <222> LOCATION: (18)
501 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE
503 <220> FEATURE:
W--> 504 <221> NAME/KEY: MOS_RES mod-RES
505 <222> LOCATION: (1)
506 <223> OTHER INFORMATION: ACETYLATION
508 <400> SEQUENCE: 30
509 Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu
E--> 510 Lys
E--> 511 1 5 10 15
513 Lys Lys
518 <210> SEQ ID NO: 31
519 <211> LENGTH: 20
520 <212> TYPE: PRT
521 <213> ORGANISM: Human immunodeficiency virus
523 <220> FEATURE:
524 <221> NAME/KEY: LIPID
525 <222> LOCATION: (20)
526 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE

```

*same**same**same*

RAW SEQUENCE LISTING                      DATE: 02/20/2001  
 PATENT APPLICATION: US/09/555,780A        TIME: 17:33:36

Input Set : A:\Pto.txt  
 Output Set: N:\CRF3\02202001\I555780A.raw

```

528 <400> SEQUENCE: 31
529 Glu Lys Ile Arg Leu Arg Pro Gly Gly Lys Lys Lys Tyr Lys Leu
E--> 530 Lys
E--> 531 1 5 10 15
533 His Ile Val Lys
E--> 534 20
538 <210> SEQ ID NO: 32
539 <211> LENGTH: 32
540 <212> TYPE: PRI
541 <213> ORGANISM: Human immunodeficiency virus
543 <220> FEATURE:
544 <221> NAME/KEY: LIPID
545 <222> LOCATION: (32)
546 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE
548 <400> SEQUENCE: 32
549 Ala Ile Phe Gln Ser Ser Met Thr Lys Ile Leu Glu Pro Phe Arg
E--> 550 Lys
E--> 551 1 5 10 15
553 Gln Asn Pro Asp Ile Val Ile Tyr Gln Tyr Met Asp Asp Leu Tyr
E--> 554 Lys
E--> 555 20 25 30
562 <210> SEQ ID NO: 33
563 <211> LENGTH: 31
564 <212> TYPE: PRI
565 <213> ORGANISM: Human immunodeficiency virus
567 <220> FEATURE:
568 <221> NAME/KEY: LIPID
569 <222> LOCATION: (31)
570 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE
572 <400> SEQUENCE: 33
573 His Thr Gln Gly Tyr Phe Pro Asp Trp Gln Asn Tyr Thr Pro Gly
E--> 574 Pro
E--> 575 1 5 10 15
577 Gly Val Arg Tyr Pro Leu Thr Phe Gly Trp Leu Tyr Lys Leu Lys
E--> 578 20 25 30
582 <210> SEQ ID NO: 34
583 <211> LENGTH: 21
584 <212> TYPE: PRT
585 <213> ORGANISM: Plasmodium falciparum
587 <220> FEATURE:
588 <221> NAME/KEY: LIPID
589 <222> LOCATION: (21)
590 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE
592 <400> SEQUENCE: 34
593 Leu Leu Ser Asn Ile Glu Glu Pro Lys Glu Asn Ile Ile Asp Asn
E--> 594 Leu
E--> 595 1 5 10 15
597 Leu Asn Asn Ile Lys
E--> 598 20

```

*same*

*same*

*same*

*same*

## RAW SEQUENCE LISTING

DATE: 02/20/2001

PATENT APPLICATION: US/09/555,780A

TIME: 17:33:36

Input Set : A:\Pto.txt

Output Set: N:\CRF3\02202001\I555780A.raw

602 <210> SEQ ID NO: 35  
 603 <211> LENGTH: 27  
 604 <212> TYPE: PRT  
 605 <213> ORGANISM: Plasmodium falciparum  
 607 <220> FEATURE:  
 608 <221> NAME/KEY: LIPID  
 609 <222> LOCATION: (27)  
 610 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE  
 612 <220> FEATURE:  
 613 <221> NAME/KEY: MOD\_RES  
 614 <222> LOCATION: (1)  
 615 <223> OTHER INFORMATION: ACETYLATION  
 617 <400> SEQUENCE: 35  
 618 Asp Glu Leu Phe Asn Glu Leu Leu Asn Ser Val Asp Val Asn Gly

E--> 619 Glu  
 E--> 620 1 5 10 15  
 622 Val Lys Glu Asn Ile Leu Glu Glu Ser Gln Lys  
 E--> 623 20 25

627 <210> SEQ ID NO: 36  
 628 <211> LENGTH: 27  
 629 <212> TYPE: PRT  
 630 <213> ORGANISM: Plasmodium falciparum  
 632 <220> FEATURE:  
 633 <221> NAME/KEY: LIPID  
 634 <222> LOCATION: (27)  
 635 <223> OTHER INFORMATION: PALMITOYL DERIVATIVE  
 637 <220> FEATURE:  
 638 <221> NAME/KEY: MOD\_RES  
 639 <222> LOCATION: (1)  
 640 <223> OTHER INFORMATION: ACETYLATION  
 642 <400> SEQUENCE: 36  
 643 Leu Glu Glu Ser Gln Val Asn Asp Asp Ile Phe Asn Ser Leu Val

E--> 644 Lys  
 E--> 645 1 5 10 15  
 647 Ser Val Gln Gln Glu Gln Gln His Asn Val Lys  
 E--> 648 20 25

1850 <210> SEQ ID NO: 144  
 1851 <211> LENGTH: 9 *10 shown*  
 1852 <212> TYPE: PRT  
 1853 <213> ORGANISM: Human immunodeficiency virus type 1  
 1855 <400> SEQUENCE: 144  
 1856 Glu Leu Val Asn Gln Ile Ile Glu Gln Leu

E--> 1857 1 5 *10 ← insert*  
 2235 <210> SEQ ID NO: 179  
 2236 <211> LENGTH: 8 *9*  
 2237 <212> TYPE: PRT  
 2238 <213> ORGANISM: Human immunodeficiency virus type 1  
 2240 <400> SEQUENCE: 179  
 2241 Arg Tyr Leu Lys Asp Gln Gln Leu Leu

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/555,780A

DATE: 02/20/2001

TIME: 17:33:36

Input Set : A:\Pto.txt

Output Set: N:\CRF3\02202001\I555780A.raw

E--> 2242 1 5  
2862 <210> SEQ ID NO: 236  
2863 <211> LENGTH: 11/10  
2864 <212> TYPE: PRT  
2865 <213> ORGANISM: Human immunodeficiency virus type 1  
2867 <400> SEQUENCE: 236  
2868 Val Pro Val Trp Lys Glu Ala Thr Thr Thr  
E--> 2869 1 5 10  
3403 <210> SEQ ID NO: 285  
3404 <211> LENGTH: 9  
3405 <212> TYPE: PRT  
3406 <213> ORGANISM: Epstein-Barr virus  
E--> 3408 <400> SEQUENCE: 284  
3409 Ile Val Thr Asp Phe Ser Val Ile Lys  
3410 1 5  
E--> 341 57

*see next page for  
explanation*



<210> 285

<211> 9

<212> PRT

<213> Epstein-Barr virus

<400> 285 ← insert number

Ile Val Thr Asp Phe Ser Val Ile Lys

1

5

(57) delete at end of file

## VERIFICATION SUMMARY

DATE: 02/20/2001

PATENT APPLICATION: US/09/555,780A

TIME: 17:33:38

Input Set : A:\Pto.txt

Output Set: N:\CRF3\02202001\I555780A.raw

L:19 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:20 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:52 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
M:332 Repeated in SeqNo=2  
L:76 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
M:332 Repeated in SeqNo=3  
L:100 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4  
M:332 Repeated in SeqNo=4  
L:120 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5  
M:332 Repeated in SeqNo=5  
L:144 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:6  
M:332 Repeated in SeqNo=6  
L:168 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:7  
M:332 Repeated in SeqNo=7  
L:358 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:23  
M:332 Repeated in SeqNo=23  
L:378 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:24  
M:332 Repeated in SeqNo=24  
L:390 M:283 W: Missing Blank Line separator, <220> field identifier  
L:397 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:25  
M:332 Repeated in SeqNo=25  
L:417 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:26  
M:332 Repeated in SeqNo=26  
L:437 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:27  
M:332 Repeated in SeqNo=27  
L:457 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:28  
M:332 Repeated in SeqNo=28  
L:481 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:29  
M:332 Repeated in SeqNo=29  
L:504 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:30  
L:510 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:30  
M:332 Repeated in SeqNo=30  
L:530 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:31  
M:332 Repeated in SeqNo=31  
L:550 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:32  
M:332 Repeated in SeqNo=32  
L:574 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:33  
M:332 Repeated in SeqNo=33  
L:594 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:34  
M:332 Repeated in SeqNo=34  
L:619 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:35  
M:332 Repeated in SeqNo=35  
L:644 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:36  
M:332 Repeated in SeqNo=36  
L:664 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:37  
M:332 Repeated in SeqNo=37  
L:1640 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:125  
M:332 Repeated in SeqNo=125

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/555,780A

DATE: 02/20/2001

TIME: 17:33:38

Input Set : A:\Pto.txt

Output Set: N:\CRF3\02202001\I555780A.raw

L:1666 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:127  
M:332 Repeated in SeqNo=127  
L:1857 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:144  
L:1857 M:252 E: No. of Seq. differs, <211>LENGTH:Input:9 Found:10 SEQ:144  
L:2242 M:252 E: No. of Seq. differs, <211>LENGTH:Input:8 Found:9 SEQ:179  
L:2869 M:252 E: No. of Seq. differs, <211>LENGTH:Input:11 Found:10 SEQ:236  
L:3386 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:283  
M:332 Repeated in SeqNo=283  
L:3408 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:285 differs:284  
L:3414 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:0  
L:25 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (234) Counted (285)